

CIVIL ENGINEER

*Class specifications are intended to present a descriptive list of the range of duties performed by employees in the class. Specifications are **not** intended to reflect all duties performed within the job.*

DEFINITION

To perform professional engineering work involving the design, investigation and construction of public works projects including streets, traffic controls, water and utility systems; and to review and prepare plans and specifications.

DISTINGUISHING CHARACTERISTICS

This is the first level in the professional engineer series. This class is distinguished from the Project Engineer by the performance of technical support tasks and duties including conducting independent plan reviews, performing independent design of smaller projects, reviewing complex construction drawings, and serving as a project team member for large and complex projects. Employees at this level receive only occasional instruction or assistance as new or unusual situations arise.

SUPERVISION RECEIVED AND EXERCISED

Receives general supervision from higher level engineering staff.

May exercise functional and technical supervision over technical engineering staff.

ESSENTIAL AND MARGINAL FUNCTION STATEMENTS--*Essential and other important responsibilities and duties may include, but are not limited to, the following:*

Essential Functions:

1. Perform professional civil engineering calculations for various projects; prepare and review the adequacy and accuracy of computations, preliminary layouts and design work from field and survey data.
2. Prepare special engineering studies and reports; conduct comprehensive studies for system master planning of future expansions including traffic and flood control systems and other public works projects.
3. Prepare engineering designs, specifications, costs and quantity estimates for public work projects; obtain required easements or permits for streets, water and sewer system construction, utility structures and other public works projects.
4. Exercise professional engineering judgment in accordance with current accepted practice of civil engineering and appropriate laws and codes.

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Essential Functions:

5. Provide assistance to construction inspectors in the interpretation of plans and resolution of problems during construction; review as-built plans to ensure compliance with original plans and specifications.
6. Review and approve changes to approved plans and specifications; process a variety of permits.
7. Provide public counter support to developers, builders, contractors and the general public pertaining to city engineering policies and procedures.
8. Prepare maps, deeds, legal descriptions and other contract documents; operate in autocad.
9. Maintain constant awareness of progress on assigned projects to assure compliance with designated time and cost schedules for project completion.

Marginal Functions:

1. Attend planning commission meetings and other sessions of various committees as directed by management staff.
2. Perform related duties and responsibilities as required.

QUALIFICATIONS

Knowledge of:

Principles and practices of civil and structural engineering.
Terminology, methods, practices and techniques used in technical civil engineering report preparation.
Materials, tools and equipment used in civil engineering.
Principles of mathematics as applied to engineering work.
Modern office procedures, methods and computer equipment.
Recent developments, current literature and sources of information regarding civil engineering.
Pertinent federal, state and local laws, codes and regulations including civil engineering laws and regulations.

Ability to:

Develop, review and modify civil engineering plans, designs and specifications.
Conduct basic engineering studies and develop appropriate recommendations.
Perform technical research on engineering problems.
Compile rough technical data and prepare statistical and narrative reports from field studies.
Prepare and maintain technical civil engineering records and prepare reports.
Operate computer engineering systems.
Communicate clearly and concisely, both orally and in writing.
Establish and maintain cooperative working relationships with those contacted in the course of work.
Maintain mental capacity which allows for effective interaction and communication with others.

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Ability to:

Maintain effective audio-visual discrimination and perception needed for:

- *Making observations*
- *Communicating with others*
- *Reading and writing*
- *Operating assigned equipment.*

Experience and Training Requirements

Experience:

One year of professional (post-license) civil engineering experience.

Training:

Equivalent to a Bachelor's degree from an accredited college or university with major course work in civil engineering or a field related to the work.

License or Certificate

Possession of a professional civil engineer license in any state on the date of application, and possession of a professional civil engineer license in the state of Nevada within six months of the date of appointment.

WORKING CONDITIONS

Environmental Conditions:

Office and field environment; exposure to dust, noise and construction equipment.

Physical Conditions:

Essential and marginal functions may require maintaining physical condition necessary for sitting, standing and walking for prolonged periods of time.

ARB
REV 3/23/99 (formerly Civil Engineer I/II (X))
FLSA & City: nonexempt

CSB 4/14/99